

# ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



## STAFF REPORT

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**MEETING DATE:** 7/10/2024

**Staff Report No. 24-372**

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**TO:** AC Transit Board of Directors  
**FROM:** Michael A. Hursh, General Manager/Chief Executive Officer  
**SUBJECT:** USDOT FY24 SMART Grant Application

### ACTION ITEM

**AGENDA PLANNING REQUEST:**

**RECOMMENDED ACTION(S):**

Consider authorizing the General Manager or his designee to file and execute applications, and any resulting funding agreements or other such documentation required, for the U.S Department of Transportation (USDOT) Fiscal Year (FY) 2024 Strengthening Mobility and Revolutionizing Transportation (SMART) grant for the Zero Emission Bus Data Integration and Management Environment System (ZEBDIME) Project.

Staff Contact:  
Chris Andrichak, Chief Financial Officer

**STRATEGIC IMPORTANCE:**

Goal - Financial Stability and Resiliency  
Initiative - Financial Efficiency and Revenue Maximization

The proposed project will improve service efficiency and enhance service reliability by improving the charging management of battery electric buses.

**BUDGETARY/FISCAL IMPACT:**

Staff recommends applying for up to \$2 million of SMART Program grant funding to plan and develop the ZEBDIME. ZEBDIME will use Artificial Intelligence and system automation to integrate transit data sources and determine optimized bus charging management that maximizes charging schedules to support transit service.

This grant does not require a local match.

**BACKGROUND/RATIONALE:**

On May 13, 2024, the USDOT issued a Notice of Funding Opportunity for the SMART Grant program. The purpose of the SMART Grant is to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety. The program funds projects that are focused on using technology innovations to solve real-world challenges, and building data and technology capacity and expertise in the public sector.

Staff is planning to develop and test software solutions that will maximize battery changing management to support efficient charging, minimize bus downtime, and support more reliable service deployment.

Applications are due on July 12, 2024.

**ADVANTAGES/DISADVANTAGES:**

By applying for this grant, the District would have the opportunity to obtain funding to develop and test a prototype of the ZEBDIME system. This grant supports a currently planned project included in both the Capital Budget and Capital Improvement Plan.

**ALTERNATIVES ANALYSIS:**

Staff considered submitting SMART grant applications for several possible projects, including supporting a self-generation system for powering BEBs and D4, as well as cloud-based Transit Signal Prioritization in Fremont. The ZEBDIME project was ultimately considered the most ready and competitive for this grant program at this time.

**PRIOR RELEVANT BOARD ACTION/POLICIES:**

None

**ATTACHMENTS:**

None

**Prepared by:**

Emily Heard, Capital Planning and Grants Manager

**In Collaboration with:**

Mike Carvalho, Innovation and Technology Manager

**Approved/Reviewed by:**

Richard Oslund, Director of Management & Budget

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Robert del Rosario, Director of Services Development and Planning

Manjit K. Sooch, Director of Innovation and Technology

Shayna van Hoften, Interim General Counsel/Chief Legal Officer